

Australian Government

# Assessment Requirements for UEEEL0048 Install and maintain emergency lighting systems

Release: 1

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## **Modification History**

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

# **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including implementing risk control measures
- applying sustainable energy principles and practices
- checking installed apparatus
- completing and reporting installation and maintenance activities
- consulting with relevant person/s
- installing electrical wiring and equipment for centrally supplied systems
- installing emergency lighting systems
- isolating circuits/machines/plants
- locating apparatus and equipment
- maintaining emergency lighting systems
- preparing to install and maintain emergency systems
- terminating wiring.

## **Knowledge Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- battery systems used in emergency lighting, including types of batteries and their characteristics, recharging arrangements and procedures for testing emergency lighting
- communication techniques
- design of emergency escape luminaire installation
- electrical wiring and equipment for centrally supplied systems
- emergency lighting and exit sign luminaires
- design of emergency escape luminaire installations, including:
  - provision of acceptable emergency escape luminaires
    - installations employing direct and indirect lighting

- lighting of stairways and identification and marking of emergency escape luminaires
- emergency lighting control systems, including wired and wireless control
- emergency lighting installation and maintenance, including:
  - arrangements and control
  - labelling of devices operation of emergency lighting
- emergency power supplies for single and centrally supplied systems, including:
  - emergency power source, batteries and their installation, battery charger assembly, inverters and alarm systems
- installation and maintenance workplace procedures for single point systems, including battery replacement and cleaning of emergency luminaires
- installation of electrical wiring and equipment for centrally supplied systems, including:
  - circuit voltage-drop
  - · protection against over current and the electrical installation against fire
  - segregation or identification of sub-mains and arrangement of final sub-circuits
- inspection of electrical wiring and equipment for centrally supplied and single point systems, including:
  - the required procedures for six and twelve-monthly inspections
  - maintenance and inspection requirements and relevant industry compliance standards, including AS/NZS 2293 Emergency lighting and exit signs for buildings series, and Building Code of Australia (BCA)
  - information required for operating and maintaining the system
  - maintenance manual
  - provision for the recording of maintenance
- quality assurance processes
- requirements for self-contained emergency escape luminaires and exit signs, including:
  - arrangement and control, electrical requirements and control equipment
  - batteries and battery chargers
  - self-contained automatic discharge testing facilities
  - suitability for operating temperatures
- sustainable energy principles and practices
- unplanned events and problem-solving techniques.

### **Assessment Conditions**

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational

situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

### Links

Companion Volume implementation guides are found in VETNet -https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6